

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Brian Douglas Fiut, et al.

Serial No. Unassigned

Filed: Herewith

For: INTEGRATION OF REMOTE MICROCELL
WITH CDMA INFRASTRUCTURE

Attorney Docket No.: SBC 0112 PA (A00432)

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December 13, 2001
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Angie Moscovitz


Signature

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Box Patent Application
Washington, D.C. 20231

Sir:

Prior to the examination of the above-identified continuation application, please enter the following amendment.

In The Specification:

On Page 1, before the first line, please add the following:

CROSS-REFERENCE TO RELATED APPLICATIONS

This is a continuation of United States Patent Application
Serial No. 09/088,506 filed on June 1, 1998.

In The Abstract:

Please amend the abstract to read as follows:

An integrated microcellular communication system and a CDMA communication system having signal advancing capabilities wherein a signal is advanced to compensated for the time delay induced by communication signal travel over a fiber optic connections between a base station cellsite and a remote microcell.

In The Claims:

Please add the following new claims 14-22.

14. (New) A microcellular communication system integrated with a code division multiple access communications system comprising:

a microcellular communication system having at least one remote;

a code division multiple access (CDMA) communications system comprising:

a base station in communication with said at least one remote;

at least one face in communication with said base station; and

signal advancing capability;

means for measuring a fiber length of optical fiber connections between said base station and said at least one remote microcell in said CDMA communications system;

means for measuring a loss in said fiber optic connections;

means for measuring remote power output of said at least one remote microcell;

means for calculating an advance of a CDMA signal;

means for translating said calculations to a database for advancing said signal allowing said at least one remote to communicate with said at least one face; and

means for setting output levels of said CDMA system from said calculations.

15. (New) The integrated system as claimed in claim 1 further comprising means for testing said integrated system for proper operation.

16. (New) The integrated system as claimed in claim 1 wherein said microcellular communications system further comprises a stand-alone microcellular communications system.

17. (New) The integrated system as claimed in claim 3 further comprising hardware for interconnecting said at least one remote and said at least one face.

18. (New) The integrated system as claimed in claim 4 further comprising:

a combiner for each face to be integrated;

a meter connected to said CDMA system for measuring output power at said at least one face;

a transmit cable connected between each of said combiners;

a receive cable connected to each of said combiners;

a termination for each of said receive cables.

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19. (New) The integrated system as claimed in claim 1 wherein said microcellular communication system further comprises a simulcast microcellular communication system.

20. (New) The integrated system as claimed in claim 6 further comprising hardware for interconnecting said at least one remote and said at least one face.

21. (New) The integrated system as claimed in claim 7 further comprising:

a transmit cable connected to each of said at least one faces;

a combiner connected to each of said transmit cables;

an interface module for said remote wherein each of said transmit cables are connected to said interface module;

a receive cable connected between said interface module and said at least one face;

a combiner connected to said receive cable; and

an attenuator connected to said combiner and said receive cable.

22. (New) The integrated system as claimed in claim 1 wherein said microcell communication system further comprises a transmit antenna and a receive antenna and said means for calculating an advance of said CDMA signal further comprises:

means for calculating propagation delay of said transmit antenna;

means for calculating propagation delay of said receive antenna;

means for selecting a lowest value of said propagation delay for both said transmit and said receive antennas;

means for recording said selected lowest values;

means for calculating a maximum differential of all delay calculations for said remote;

means for calculating a sector size of said face;

means for calculating a search window size for said face being integrated with said remote;

means for calculating an actual input analog composite power on said face being integrated with said remote;

means for calculating a total gain for said at least one remote;

means for calculating an actual gain for said at least one remote; and

means for calculating CDMA input power for said at least one remote.

Respectfully submitted,

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Dated: December 13, 2001

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"VERSION WITH MARKINGS TO SHOW CHANGES MADE"**In The Specification:**

On Page 1, before the first line, please add the following:

CROSS-REFERENCE TO RELATED APPLICATIONS

This is a continuation of United States Patent Application
Serial No. 09/088,506 filed on June 1, 1998.

In The Abstract:

Please amend the abstract to read as follows:

[A method of interconnecting] An integrated microcellular communication system and a CDMA [cellsite] communication system having signal advancing capabilities [with at least one remote microcell without re-synchronization capabilities. The method of the present invention sufficiently advances the signal to compensate] wherein a signal is advanced to compensated for the time delay induced by communication signal travel over a fiber optic connections between a base station cellsite and a remote microcell.

In The Claims:

Please add the following new claims 14-22.

14. (New) A microcellular communication system integrated with a code division multiple access communications system comprising:
a microcellular communication system having at least one remote;
a code division multiple access (CDMA) communications system comprising;

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a base station in communication with said at least one remote;

at least one face in communication with said base station; and

signal advancing capability;

means for measuring a fiber length of optical fiber connections between said base station and said at least one remote microcell in said CDMA communications system;

means for measuring a loss in said fiber optic connections;

means for measuring remote power output of said at least one remote microcell;

means for calculating an advance of a CDMA signal;

means for translating said calculations to a database for advancing said signal allowing said at least one remote to communicate with said at least one face; and

means for setting output levels of said CDMA system from said calculations.

15. (New) The integrated system as claimed in claim 1 further comprising means for testing said integrated system for proper operation.

16. (New) The integrated system as claimed in claim 1 wherein said microcellular communications system further comprises a stand-alone microcellular communications system.

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17. (New) The integrated system as claimed in claim 3 further comprising hardware for interconnecting said at least one remote and said at least one face.

18. (New) The integrated system as claimed in claim 4 further comprising:

a combiner for each face to be integrated;

a meter connected to said CDMA system for measuring output power at said at least one face;

a transmit cable connected between each of said combiners;

a receive cable connected to each of said combiners;

a termination for each of said receive cables.

19. (New) The integrated system as claimed in claim 1 wherein said microcellular communication system further comprises a simulcast microcellular communication system.

20. (New) The integrated system as claimed in claim 6 further comprising hardware for interconnecting said at least one remote and said at least one face.

21. (New) The integrated system as claimed in claim 7 further comprising:

a transmit cable connected to each of said at least one faces;

a combiner connected to each of said transmit cables;

an interface module for said remote wherein each of said transmit cables are connected to said interface module;

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a receive cable connected between said interface module and said at least one face;

a combiner connected to said receive cable; and

an attenuator connected to said combiner and said receive cable.

22. (New) The integrated system as claimed in claim 1 wherein said microcell communication system further comprises a transmit antenna and a receive antenna and said means for calculating an advance of said CDMA signal further comprises:

means for calculating propagation delay of said transmit antenna;

means for calculating propagation delay of said receive antenna;

means for selecting a lowest value of said propagation delay for both said transmit and said receive antennas;

means for recording said selected lowest values;

means for calculating a maximum differential of all delay calculations for said remote;

means for calculating a sector size of said face;

means for calculating a search window size for said face being integrated with said remote;

means for calculating an actual input analog composite power on said face being integrated with said remote;

means for calculating a total gain for said at least one remote;

means for calculating an actual gain for said at least one remote; and

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means for calculating CDMA input power for said at
least one remote.

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